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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,860	04/18/2001	Sanjay Savur	50013-00001	6235

25231 7590 03/14/2003

MARSH, FISCHMANN & BREYFOGLE LLP
3151 SOUTH VAUGHN WAY
SUITE 411
AURORA, CO 80014

EXAMINER

WEINSTEIN, STEVEN L

ART UNIT	PAPER NUMBER
1761	9

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/807860	SAVUR ET AL	
	Examiner S. WEINSTEIN	Group Art Unit 1761	

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

Responsive to communication(s) filed on 12/2/02

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

Claim(s) 1,3,5,10-12,25,26,41,44,45,49,62,82,117,120,122-125,129,132,143,146,147,148,153-160 is/are pending in the application.

Of the above claim(s) 41,44,45,49,62,82,117,120,122-125,129,132 is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1,3,5,10-12,25,26,143,146,147,148,153-160 is/are rejected.

Claim(s) _____ is/are objected to.

Claim(s) _____ are subject to restriction or election requirement

Application Papers

The proposed drawing correction, filed on _____ is approved disapproved.

The drawing(s) filed on _____ is/are objected to by the Examiner

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

All Some* None of the:

Certified copies of the priority documents have been received.

Certified copies of the priority documents have been received in Application No. _____.

Copies of the certified copies of the priority documents have been received

in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Interview Summary, PTO-413

Notice of Reference(s) Cited, PTO-892

Notice of Informal Patent Application, PTO-152

Notice of Draftsperson's Patent Drawing Review, PTO-948

Other _____

Office Action Summary

In a response received 12/2/02 to a restriction requirement mailed 10/25/02, paper no. 6, applicants have elected Group I, claims 1, 3, 5, 10-12, 25, 26, 143, 146-148 and 153-160 without traverse. Claims 41, 44, 45, 49, 62, 82, 117, 120, 122-125, 129 and 132 are withdrawn from further consideration as being drawn to a non-elected invention.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 25, 26, 147, 153 and 154 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Huston (WO 91/15719).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5, 10-12, 143, 146, 148 and 155-160 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huston (WO 91/15719) in view of Samuel (EP 353021), Bishop (WO 95/05753), Fukuda (Jp 1-82083) and Lovegrove et al (EP 136042).

Huston discloses a method of adjusting the atmosphere within a substantially sealed chamber containing respiring product, wherein the chamber has inlet means for ambient atmosphere to enter and outlet means to permit chamber atmosphere to exit

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and wherein oxygen concentration is monitored within the chamber and the inlet is ^{means}
opened to admit ambient atmosphere so that the amount of oxygen is increased when
the oxygen concentration falls below a predetermined value and removing carbon
dioxide from the chamber at a predetermined rate so that the carbon dioxide does not
exceed a predetermined amount. Huston does this for the same reason as applicants;
i.e., to provide an atmosphere for respiring produce that is low in oxygen and relatively
high in carbon dioxide to slow down respiration and extend the life of the produce.
Samuel, Bishop, Fukuda and Lovegrove et al are relied on as further evidence of
monitoring gas chamber concentrations for respiring produce.

Claim 3 recites that the predetermined carbon dioxide removal rate is calculated
from a formula derived from a "mathematical model" of the proportions of the chamber
atmosphere subject to the requirement that the oxygen concentration within the
chamber be "substantially" maintained at a predetermined amount. Huston and indeed
the art taken as a whole are all directed to providing a controlled gas atmosphere low in
oxygen and high in carbon dioxide for slowing respiration of produce as does applicant
and Huston establishes a preprogrammed control system for doing this which controls
carbon dioxide removal, maintenance of oxygen at a predetermined rate, etc. The
objective is the same and whether this is calculated from a formula derived from a
mathematical model or not is seen to have been an obvious computation since the art
taken as a whole is well aware that respiration rates, gas concentrations, temperatures,
etc. are all interrelated variables. Thus, such a calculation would appear to be inherent
in Huston (and the art taken as a whole) or obviously derivable therefrom. In regard to

claim 5, claim 5 recites that the predetermined carbon dioxide removal rate is calculated from a formula that produces a result "substantially equal to" the result produced by "a calculation" in accordance with a recited formula. Thus, claim 5 basically recites a rate that is similar to one achieved by a formula. Note that the formula is not recited as actually being used to manipulate any variable. Only that the result would be similar to a result obtained by a formula. Since Huston's objective is the same as applicants' as noted above, then Huston would appear to also achieve a result substantially equal to a result produced by the recited calculation. In regard to claims 10-12, Huston teaches using carbon dioxide absorbing material to remove carbon dioxide. It is not clear if

Huston provides the carbon dioxide in ^c_A carbon dioxide pervious container. In any case,

Lovegrove et al teaches the conventionality of providing the carbon dioxide absorbing material in a carbon dioxide pervious bag and to modify Huston and employ a conventional pervious container for the absorbing material for its art recognized and applicants intended function would therefore have been obvious. The pervousness of the bag would inherently have to be at the rates recited for the method to reduce the reduce the carbon dioxide concentration. Claims 146, 148 and 155 are rejected for the reasons give above in regard to claim 143, claim 143 appears to differ from Huston in the recitation of flushing with a purging gas having no or low oxygen. Note, however, that Huston teaches it was known to flush with low oxygen purging gas to quickly reduce the container to low oxygen levels which is applicants' reason for using a purging gas. It is not clear whether Huston employ this practice with his method or not but it would have been obvious to do so in view of Huston's teaching of the prior art as

well as Bishops, and Harris' teaching of also using gas flushing to quickly reduce oxygen concentrations.

The remainder of the references cited in the USPTO 892 form are cited as art of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Weinstein whose telephone number is 703-308-0650. The examiner can normally be reached on Monday-Friday 7:00am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 703-308-3959. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

S. Weinstein/mn
March 11, 2003

Steve Weinstein
STEVE WEINSTEIN
PRIMARY EXAMINER (1761)
3/13/03